

**ABSTRACT OF THE DISCLOSURE**  
**TESTING AND DISPLAY OF ELECTRICAL SYSTEM IMPEDANCE**

An automated method is provided for testing an electrical circuit using a system tester. Load leads and sense leads of the tester are connectable to any two points of an electrical circuit, such as in a vehicle system, for displaying in real time the impedance between the tested circuit points. A controller is responsive to various sensed signals to calculate impedance, admittance or conductance, and related parameters, such as available cranking current, and provide results for read out or display. A load may be connected across the circuit points under test, the sensed signals derived from a current sense amplifier, a DC voltage amplifier, a ripple amplifier, and an AC amplifier.